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2001-06-01 / 0115

15-01-2001

## AMENDED CLAIMS (with response to first written opinion):

1. An apparatus for the treatment of contaminated media, comprising a rotatable housing having at least one inlet (28; 28b) for gas and at least one suction opening (10; 32) for the medium to be treated; a number of outlet openings (25; 27) arranged along the periphery of the housing; a number of vanes (22; 23) arranged in said outlet openings (25; 27); and a shaft (24) connected to the housing and connectable to a device for causing rotation of the housing;

10 characterized in that

the housing comprises at least one compartment which is essentially shaped as a truncated cone, with the inlet (10; 32) for the medium to be treated at the apex of the cone and the outlets (25; 27) at the base thereof.

15 2. The apparatus according to claim 1, wherein

20 said housing comprises an upper compartment (5) with a corresponding upper suction opening (32) and a lower compartment (7) with a corresponding lower suction opening (10), where the upper and the lower compartments are separated by a plate (20); and wherein

25 the plurality of outlet opening (25; 27) provided along the periphery of the housing belong to the upper (5) and the lower (7) compartments respectively, at the opposite end thereof with respect to the corresponding suction opening (32, 10).

30 3. The apparatus according to claim 1, wherein said housing comprises one single compartment (7) having the shape of a truncated cone with the apex facing downwards, and having a suction opening (10) at the apex of said cone, and a plate (20) forming the base of said cone and closing said compartment (7), and wherein the gas inlet (28) exits through said plate (20).

35 4. The apparatus according to claim 1, wherein said housing comprises one single compartment (7) having the shape of a truncated cone with the apex facing upwards, and having a suction opening (32) at the apex of said cone, and a plate

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(20) forming the base of said cone and closing said compartment (7), and wherein there is provided gas inlets (28b), provided by radial holes, bored through to a central channel (26) in said shaft (24).

5 5. The apparatus according to claim 2 or 4, wherein the upper suction opening (32) has the shape of an annular gap.

6. The apparatus according to any of the preceding claims, wherein the vanes (22; 23) are arranged such that they extend from the periphery and a distance inwards towards the centre of the apparatus, and form an angle ( $\alpha$ ) with an imagined line running from the outermost point of attachment for respective vane and through the centre of the entire unit.

10 7. The apparatus according to any preceding claim, wherein the rotation transferring means is a shaft (24) which is attached to the plate (20) in the centre of thereof.

15 8. The apparatus according to any of the preceding claims, wherein the shaft (24) is hollow and connected to a gas source via a throttle valve (30) for the supply of gas to the inner of the apparatus via an opening (28) in the end of the shaft (24).

20 9. A method of treatment of contaminated media containing organic material, the method comprising the following steps:

25 providing a rotatable, cone shaped housing having an inlet and an outlet for medium to be treated;

immersing said housing in the medium to be treated;

30 rotating said housing such that a vortex is generated therein;

supplying gas to the center of said vortex.

35 10. The method according to claim 9, wherein the medium has a high concentration of bacteria, e.g. E. Coli.

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11. The method according to claim 9 or 10, wherein the medium is manure, waste water sludge, leak water from waste deposits.

5 12. The method according to any of claims 9-11, wherein the speed of rotation of the housing is 500-3500 rpm, preferably 800-2800 rpm.

13. The method according to any of claims 9-12, wherein the gas is air.

10 14. The method according to any of claims 9-12, wherein the gas is ozone.

15. The method according to any of claims 9-14, wherein an apparatus according to any of claims 1-8 is used.

15 16. A product obtained by treatment of a contaminated medium with the method according to any of claims 9-15.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100